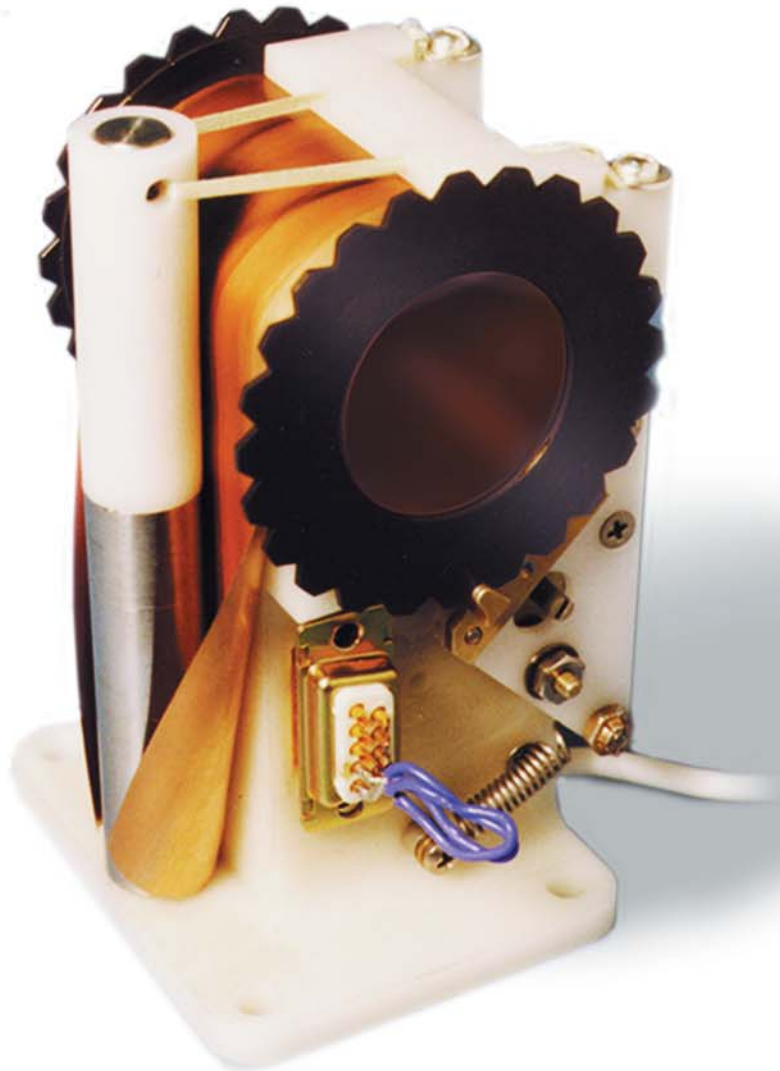


**STEM™ TIP DRUM**



# STEM™ TIP DRUM

The self-extendible Tip Drum (TDM) STEM™ Antenna for Space Applications is a small, light, self-extending space antenna. Released by an integral guillotine, stored strain energy deploys the antenna from a fly-off spool.

## SPACE APPLICATIONS

- Sub-Orbital E Field
- Sub-Orbital Waves in Space Plasma (WISP)
- Small Satellite Antennas

57 self-extendible STEM™ units have been delivered.

## PERFORMANCE MODEL A-204

### Mast Parameter

Stored Package Length	4.2 in (106.7 mm)
Stored Package Width	2.5 in (63.5 mm)
Stored Package Depth	2.5 in (63.5 mm)
Weight with 60-foot Antenna	1.25 lb (0.57 Kg)
Antenna Weight	0.0144 lb/ft (0.021 Kg/m)
Antenna Material	Beryllium Copper

### Antenna Size

Diameter	0.50 in (2.7 mm)
Thickness	0.002 in (0.051 mm)
Antenna Bending Strength	3 minimum in-lb (0.904 mm)
Antenna Bending Stiffness	2618 In <sup>2</sup> -lb (7.51 Nm <sup>2</sup> )
Extension Time for 60-foot Antenna	6 max. sec
Release Guillotine	Whittaker P/N 2800 or 5800
Release Power Recommended (per bridge)	5 amps
Release Indicator	Honeywell Microswitch P/N 11SM1-T
Guillotine/Telemetry Connector	Cannon P/N DEM9P NMB
RF Connector	Solder terminal



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